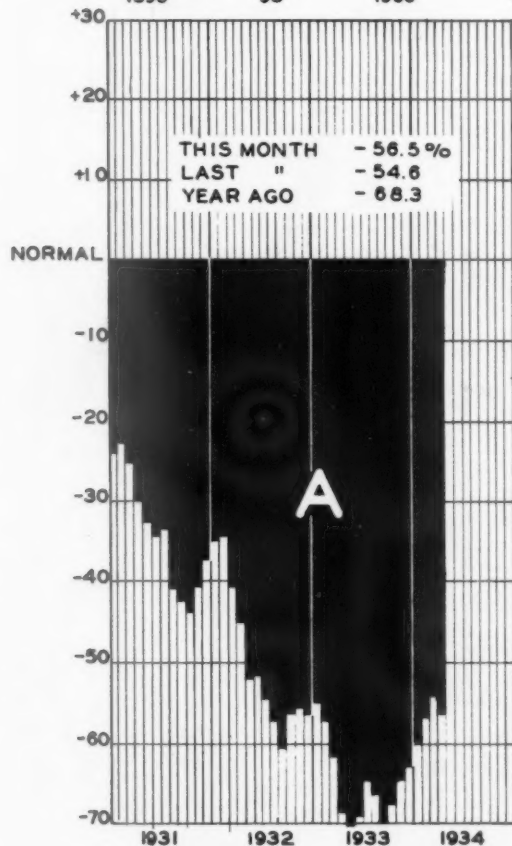
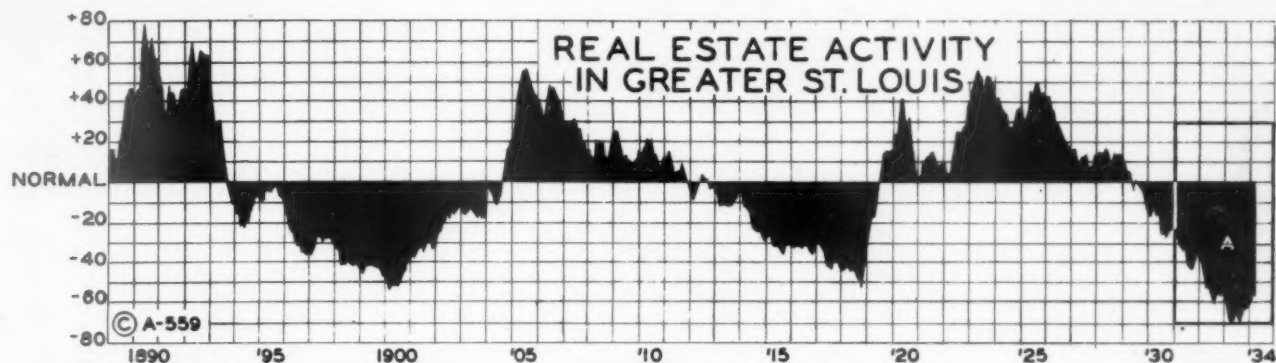




MAY, 1934

# The Real Estate ANALYST

SAINT LOUIS EDITION



at the very bottom of the chart. As explained on pages 264-266 in this issue, there is very little chance that residential building can be greatly stimulated in the near future.

In spite of the recent reaction in the stock market, due to the market control bill, general recovery is proceeding at a very rapid pace. We are inclined to think that it has now gained such momentum that it will take very great administrative or congressional blunders to stop it.

THE most significant improvement during the past month was the increased rate of absorption of vacancy. Our figures would indicate that the absorption of vacancy was greater during the month of April than it has been in any month on which we have records; 11.7% of the vacancy existing on April 6 had been absorbed by May 7. This single month's absorption has added approximately \$50,000 a month to the gross rentals received by Saint Louis property owners.

The foreclosure rate has dropped to 76 per hundred thousand families, the lowest point since 1930. This rate will continue to drop very rapidly during the balance of the year.

Rentals are stabilizing at the present time. Bungalows and the more modern single family buildings are showing a slight rise. The fall renting season will see this rise extended to most types of residential property.

Marriages are still increasing but the increase this last month was much smaller than was expected.

Real estate sales fell off slightly this last month. This is the first drop in seven months.

Building material prices, which have remained fairly constant since the first of the year, advanced 2 $\frac{3}{4}$ % last week.

Residential building is still creeping along

## HOW LONG DO HOUSES LIVE?

**H**OW long do houses "live"? This is a question of considerable importance to many different groups interested in real estate. The appraiser should know the answer, as the real value of the building he is appraising depends, to a large extent in many cases, on the probable length of its future economic life. The accountant should know so that he can make the proper division between return on and return of invested capital. The architect and the builder should know, as, with the population now growing very slowly in the United States, the larger part of the building in the future will consist of the replacement of present buildings. It is impossible to estimate the amount of building necessary for replacement purposes without knowing something of the probable life of the buildings now standing.

It is, of course, impossible to predict accurately the economic life of any particular building just as it is impossible to forecast how long any one individual may live. Actuarial tables, however, enable life insurance companies to determine years in advance their cash requirements for death claims. "Mortality tables", which will give average life expectancy, can be constructed for buildings. As far as we know, no tables of this sort have ever before been compiled for residential buildings.

When a building is erected there is always the possibility that it may be destroyed by fire, tornado, earthquake, termites or other unpredictable forces within a few years of its completion. There is also the possibility that it may be the one building in a hundred which will last many times the average life of buildings of its class and type. The unpredictable possibilities do not affect value. Value depends on probabilities; and the degree of probability can be determined only by studying a large number of cases.

The appraiser is primarily interested in the probable remaining life of a building. The probable - not possible - length of this life should determine the rate of depreciation used.

The probable life figures and charts for residential buildings presented in this issue have been prepared after considerable basic research work on dwellings built in Saint Louis. Twenty addresses were selected at random from the building permits for each year from 1879 to 1933, the longest period for which records were available. This resulted in a list of 1100 properties, twenty built fifty-five years ago, twenty fifty-four years ago, twenty fifty-three years ago, etc., down to twenty buildings erected last year. Each of these properties was personally inspected and graded on apparent depreciation and obsolescence. If the building for which the permit had been issued was no longer standing, a careful record was made of the present use of the site. The type of construction was noted on all buildings and all were classified as to occupancy.

A study of this kind is not as simple as it sounds. The first difficulty



encountered was in the change of street names and the renumbering of large districts of Saint Louis. Fully one quarter of the earlier addresses had to be checked in the Street Numbering Department of the city to find the present street name and house number. Many street names were badly confusing. There was, for instance, a Clara Avenue (now Texas) in South Saint Louis. Certain portions of Marcus were Shreve and certain portions of Shreve were Marcus. Eighteenth Street was Tayon in some sections and Second Carondelet in others. The changes in house numbers were still more confusing. For example, the house built under the permit issued for 2364 Oriole is today 5416 Oriole. Multiply the few examples given here by hundreds and some idea of the complexity of the problem is apparent.

The map on the preceding page shows the locations of the 1100 properties inspected. Each symbol on the map represents one of the 1100 addresses. There have been three building booms during these fifty-five years. Accordingly the buildings are grouped into three classes. Those marked with a dot were built from 1879-1897, those marked with a circle from 1898-1918, those marked with a cross were built from 1919 to 1934. It is clearly apparent that the distribution of the samples selected cover the city in a representative fashion.

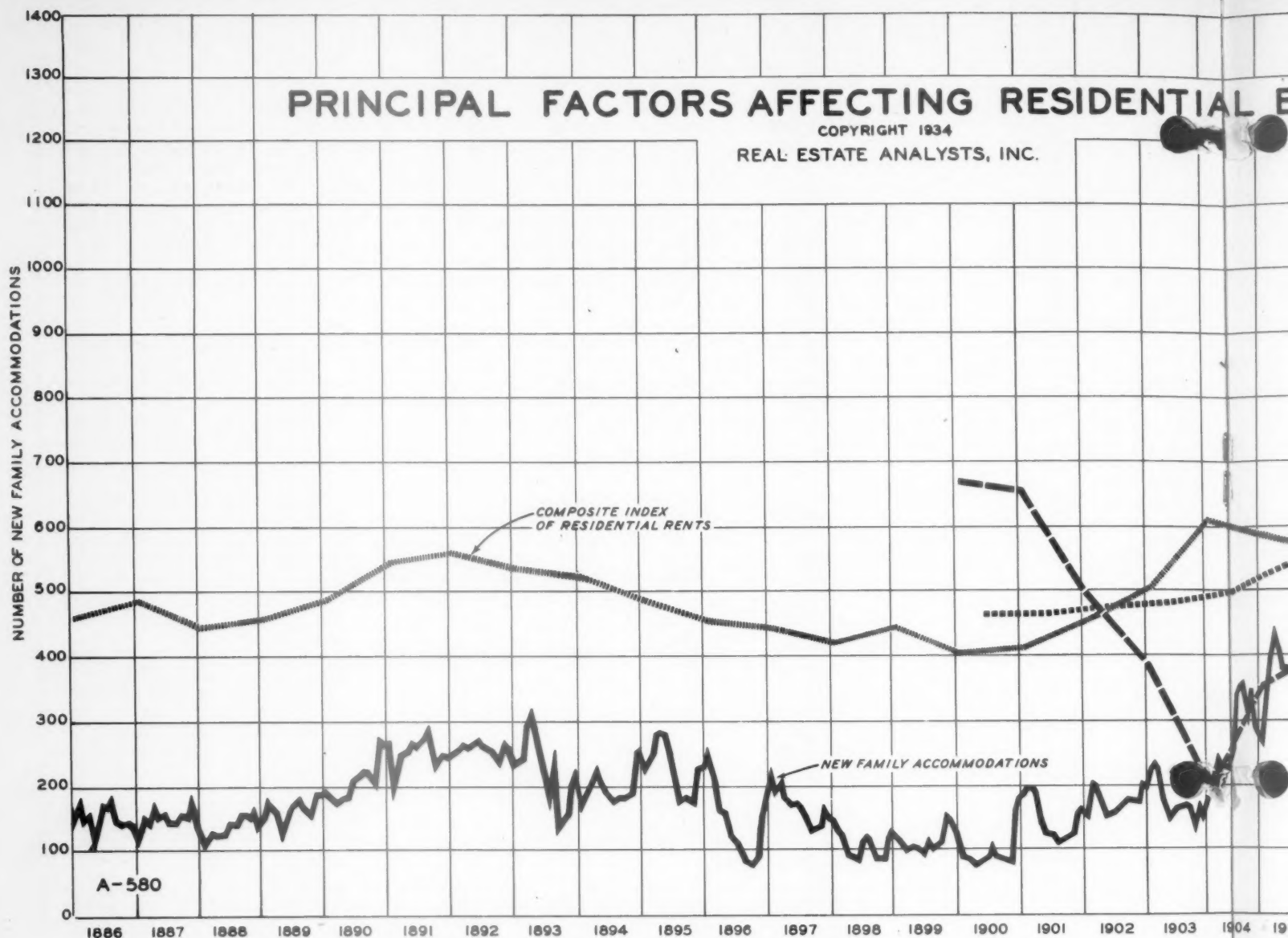
In an effort to carry the study to buildings older than fifty-five years, perspective drawings of six sections of the city, made in 1875, were checked in the field to find out how many of the buildings shown on these drawings are still standing. The section immediately south of the railroad yards and west of Twelfth Street is shown in the small reproduction below. Fifty-five percent of the buildings shown on this drawing are still standing and occupied. Each of these buildings is more than fifty-nine years old.

Based on the survey of the 1100 building permits and the buildings on the perspective drawing still remaining in use, the chart at the top of page 269 was drawn to summarize the findings of this study. This chart shows the number of buildings which can reasonably be expected to still be in service at any given age. As no figures were available for buildings more than fifty-nine years old, the probable shape of the curve for older buildings is shown by the heavier dotted line. All life expectancy studies on items as diverse as human beings, telegraph poles, electric motors and railway car wheels show substantially this same shaped curve. The light dotted line on this chart shows the average life of residential buildings, as determined by this study. This has generally been assumed to be fifty years, but our study would indicate that 72% of all residential buildings are still in use fifty years after construction.

The lower chart on page 269 shows the remaining life which can probably be expected for an average residential building of any given age. This chart may be a little harder for some to understand. Of course, it is apparent that since the aver-

(Continued on Page 268)





### CAN BUILDING UNDER PRIVATE INITIATIVE BE STIMULATED BY GOVERNMENT ACTION?

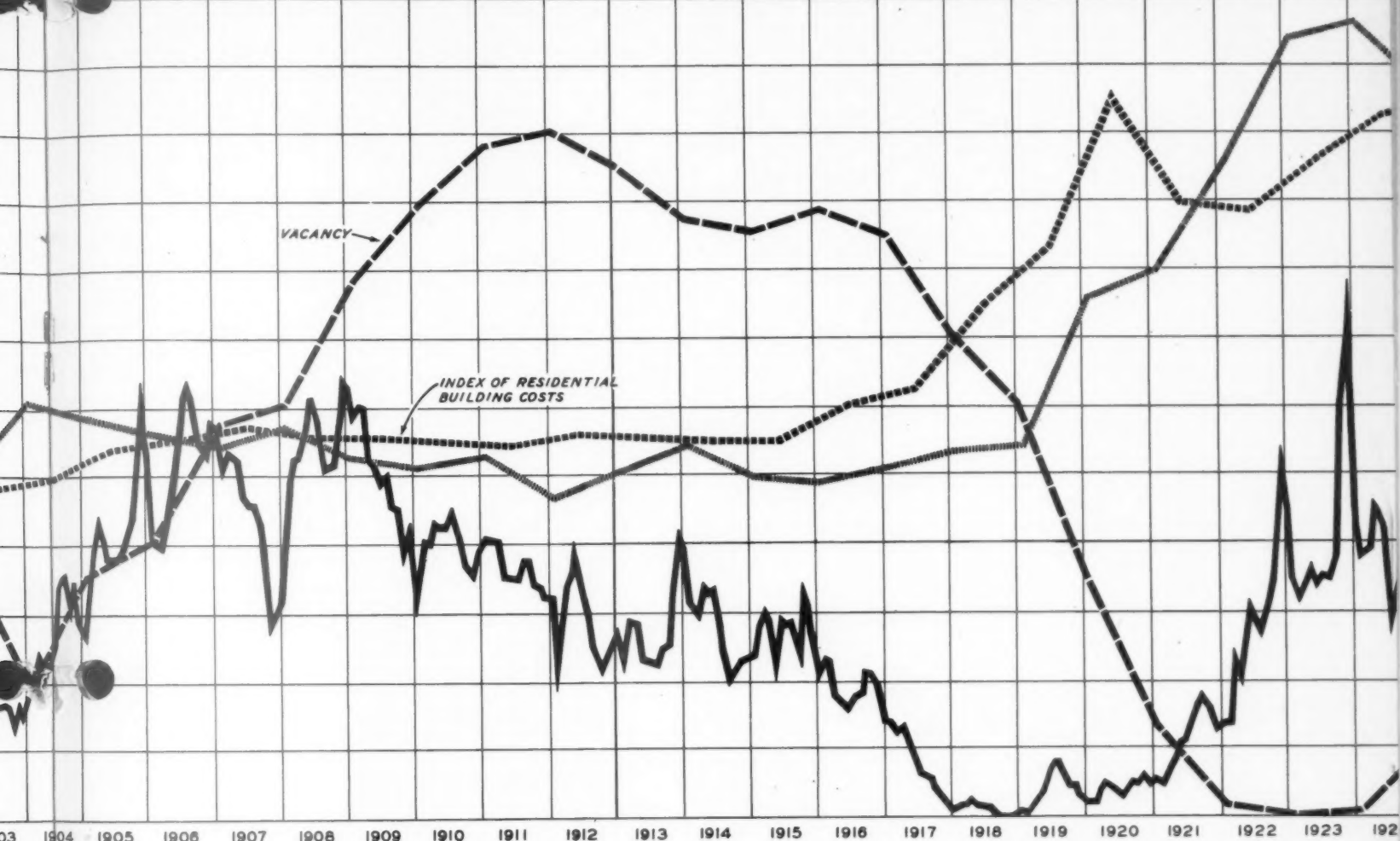
**A**LMOST half of the present unemployed were formerly employed either in the construction industry or in other industries largely dependent upon it. If private construction could be started on a large scale, unemployment would disappear very quickly. The Administration realizes this and has been making strenuous efforts to stimulate new building. So far all of its efforts have failed. At the present time, its program seems to be concentrated mainly on the loosening of credit for modernization and new building through insuring private lenders against loss up to some percentage of the total construction loan.

We would not question for one minute the importance of loosening credit to stimulate construction. Construction can never be stimulated unless ample credit is available. We do question, however, the effectiveness of loosening credit alone in stimulating any great volume of private building. There are many other factors as important as credit, and most of these factors are still negative.

Three of these factors are shown in the long chart above. The dash line shows the percentage of vacancy in the city. The rate at which this is falling is really astonishing. The dotted line shows the fluctuations of the cost of building a residential building in Saint Louis. This is rising at least as rapidly as it rose during the World War. The shaded line shows the fluctuation of residential rentals in Saint Louis. After dropping for ten years, this line seems to be stabilizing. A resultant of these factors and credit is the solid black line showing the number of family accommodations provided for by all building permits issued each month in Saint Louis.

We believe that the rapidly falling vacancy will produce a housing short-

# TIAL BUILDING

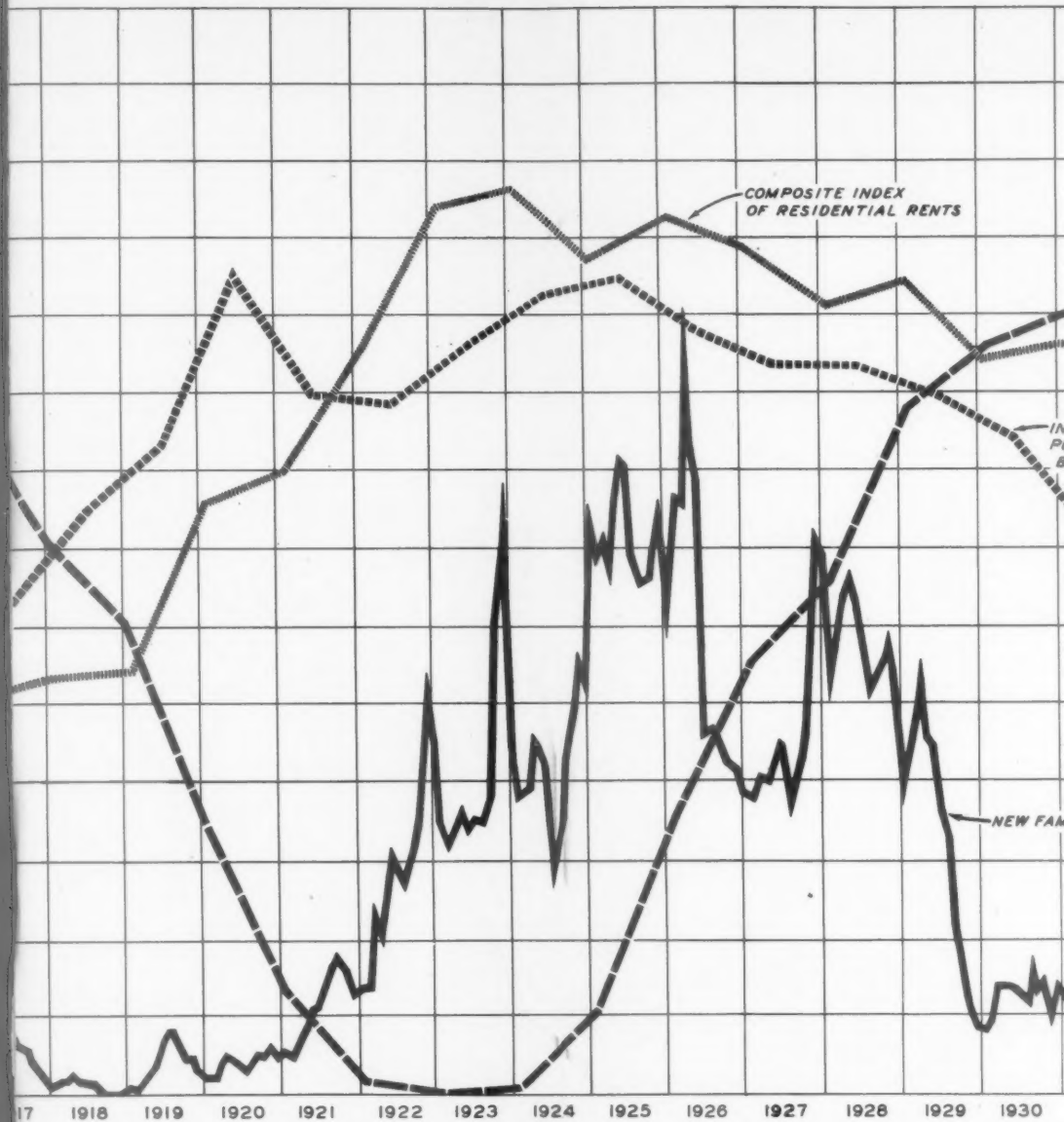


age in the near future, probably next year. The shortage of houses will cause rents to rise sharply. We believe that the housing shortage in itself will cause no great amount of building, just as it did not cause any great amount of building in 1919 and 1920 or even in 1921. Residential building started in real volume only after rentals had advanced to a high enough level (see the shaded line in 1919 and 1920) to raise the average opinion of real estate values to a point above the post-war cost of construction. When this happened, construction started without the necessity of any special stimulation.

Conditions were slightly different preceding the building boom of 1904, as a study of this chart will show. Vacancy was probably very high during the depression of the nineties. As soon as most of it was absorbed, rentals went up. Construction costs during this period rose very slightly (the dotted line above). Increased rentals were accompanied by increased values of older buildings which, due to the absence of a marked rise in the cost of construction, soon made it possible to build in competition with buildings already standing. As a result, the building boom started before the housing shortage became nearly as acute as it did in the post-war period and before rentals rose as high as they would have otherwise done.

At the present time, building costs are advancing rapidly. Buildings already constructed can be bought for less than the cost of replacing them. As building costs advance still further, due to the various wage agreements which have not yet become operative in the construction code, the discrepancy between the price of a building already built and a new building will become greater. Increasing rentals for these older buildings will gradually increase the opinion of their values held by the public until they are priced almost as high as the then cost of building a new building. When this condition develops it will again be profitable to build. Until it develops, we anticipate very little building under private initiative.

This depression has demonstrated the impossibility of bringing about any



age of houses will cause rents in itself will cause no great amount of building in 1919 (the shaded line in 1919 and 1920) to a point above the post-war condition started without the neces-

the building boom of 1904, as very high during the depression, rentals went up. Construction (the dotted line above). In- of older buildings which, due to destruction, soon made it possible to build. As a result, the building boom was as acute as it did in the past and would have otherwise done.

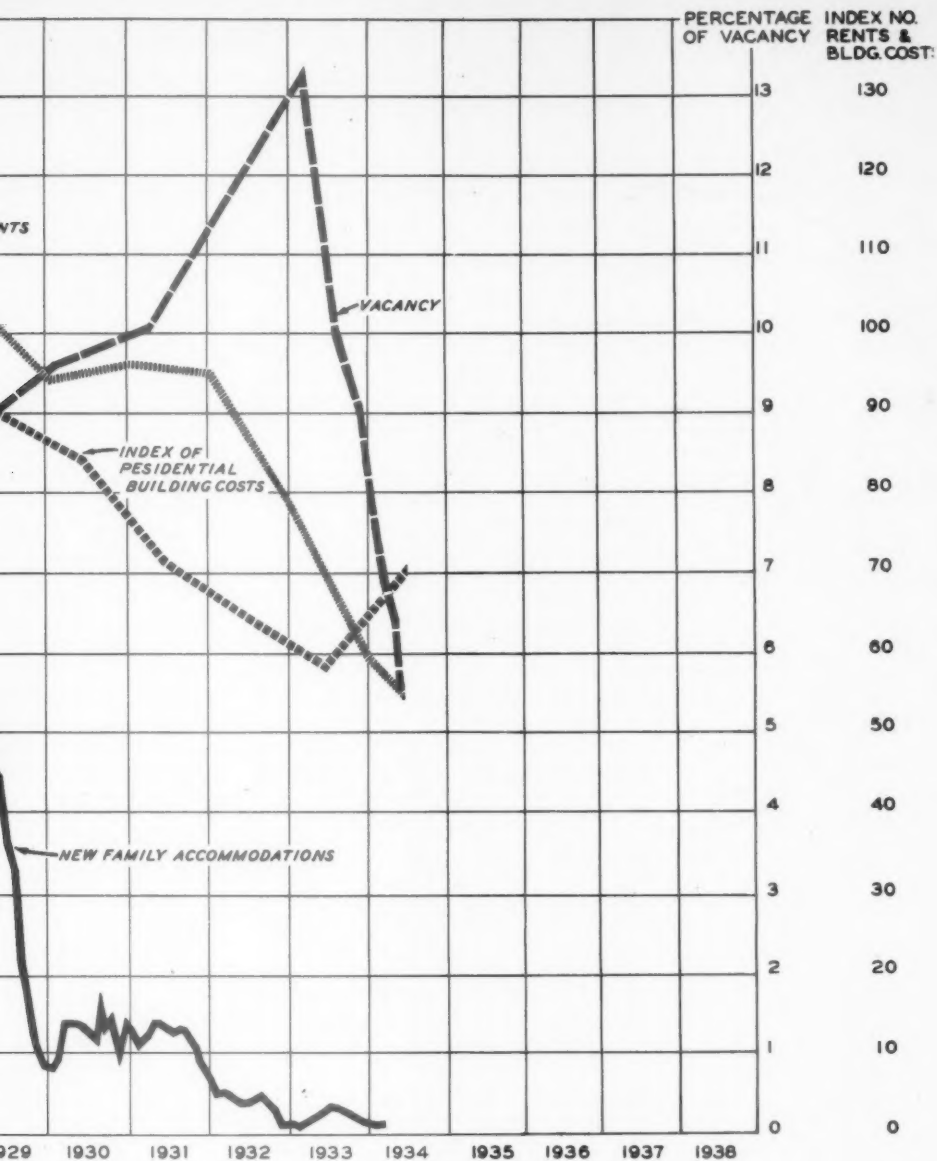
Prices are rising rapidly. Buildings are being replaced. As building agreements which have not a discrepancy between the price of the greater. Increasing rentals and opinion of their values held the then cost of building a again be profitable to build, under private initiative.

possibility of bringing about any

degree of recovery not based on failed until prices started to rise brought resumed buying. capital they may still have to build than the opinion of a realistic desire "to give a of financial loss.

We believe that the market contemplates may develop trades but it must be re- better shape than they have during the period of high repair work. Owner occupancy as they were a few years ago be the best prospects. In different cities) of the new a small portion of these are too new to need much more the owners of many others only moratoria or government

While the difficulty will retard the rapidity of recovery will undoubtedly increase costs go and the longer the values will climb. A rapid article, be it popcorn, result in an increase in price

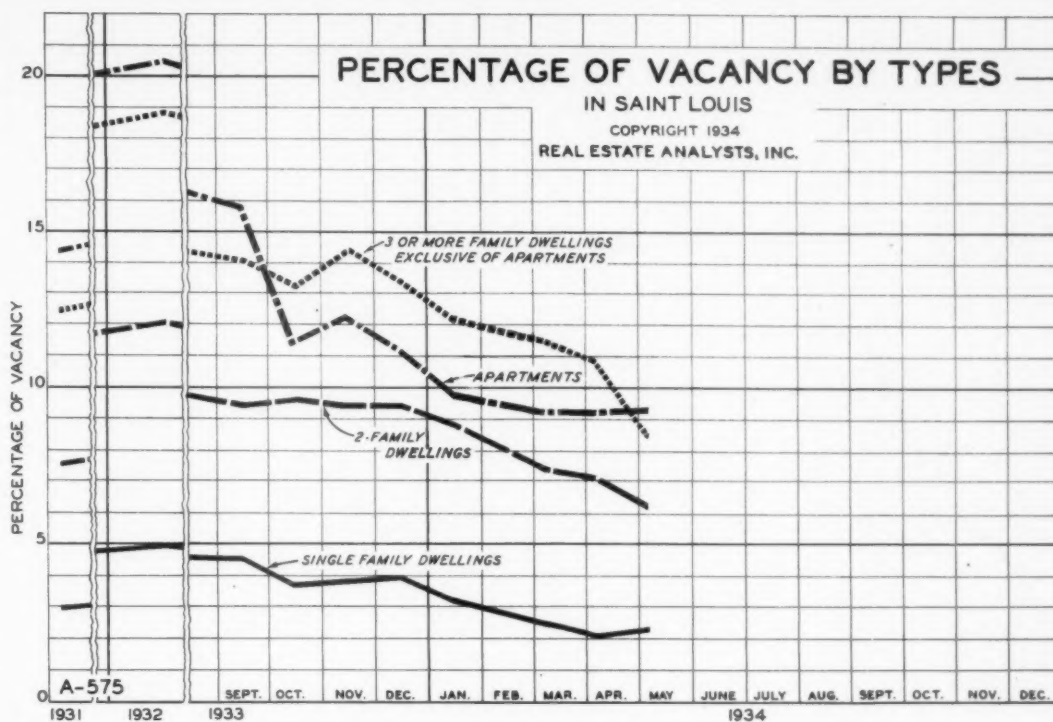


ry not based on "self interest". Every "buy now" campaign es started rising; then "self interest", not the campaign, buying. Builders will not jeopardize the small amount of still have on equities in buildings which will cost more e opinion of their worth held by the community. The al- 'to give a man a job" will not be stronger than the fear s.

leve that the modernization campaign which the Government y develop some employment among workers in the building ust be remembered that rented buildings are probably in n they have ever been before. The competition for tenants d of high vacancy caused a great deal of modernization and wner occupied buildings are probably not in as good condi- e a few years ago and the owners of these buildings will pects. However, only about a third to a half (varying in ) of the residential buildings are owner occupied and only of these will be likely prospects as some of the buildings eed much modernizing, some are too old to justify it and y others are in such precarious financial condition that r government refinancing have prevented foreclosures.

the difficulty of starting any residential building will ty of recovery general business would otherwise show, it ncrease rentals and values. The higher construction e longer new building is delayed, the higher rentals and o. A rapidly expanding demand for a limited supply of any popcorn, cotton, copper or dwelling units will always re- ase in price. This has always been true in the past.





In the table below we show the number of vacant units in the city at various times during 1933 and for the first five months of 1934.

1933		1934	
March	30,300	January	20,248
October	22,460	February	18,650
December	21,350	March	17,550
		April	16,650
		May	14,700

The number of dwelling units absorbed during each of the last five months is shown in the following table:

December, 1933	-	1102
January, 1934		1598
February	"	1100
March	"	900
April	"	1950
TOTAL - 5 MONTHS		6650

This is an average of 1330 per month. The absorption during April (from April 6 to May 7) was the most rapid we have so far experienced. If this rapid a rate should continue we would develop the housing shortage forecast in recent issues by the end of this year in place of the middle of next year. This would make certain a rapid rise in rentals by late fall.

The vacancy figures in this and preceding issues have not included elevator apartments as a separate group. We are now segregating these vacancies and hope to report them each month as a separate item.

The only figures available in the past on this type of unit are found in the vacancy surveys of 1930 and 1931. Vacancy as shown in these surveys for this type of apartment averaged:

April, 1931	-	16.4%
November, 1932		29.5%

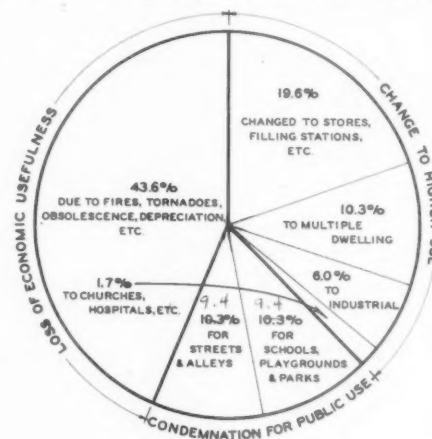
We think it entirely probable that by March, 1933, this vacancy had increased until it exceeded 35%. Our check for current vacancy is given below:

May, 1934		22.7%
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## HOW LONG DO HOUSES LIVE? (Continued from Page 263)

age life of all residential buildings was found to be sixty-three and a half years, that the life expectancy of a new building, built under comparable conditions, would be sixty-three and a half years. If, however, the building in question is now fifty years old, the average expected additional life is twenty-three years, in place of thirteen and a half, as might be supposed. Buildings now sixty-three and a half years old, in place of having an average life expectancy of zero, have a probability of eighteen and a half additional years. This lengthening of the probable life as the building gets older is due to the fact that the "weaklings" have dropped out in the earlier years. The same thing is quite noticeable in human mortality tables. At birth, the probable life for a male is slightly more than fifty-five years, but those surviving to fifty-five have an expectancy of about eighteen additional years.

These tables include demolitions of buildings as a result of many different causes, many of them not the result of physical depreciation or obsolescence. The chart to the right shows the percentage distribution of the various causes of demolition. This chart immediately raises the question of whether it is not unfair to depreciate a building on the basis of its remaining life when the figures on which its remaining life is based include demolitions due to fires, tornados, change of use and condemnation for public use. Presumably when a building is destroyed by either fire or tornado its value is recovered from the insurance company. If it is torn down to make way for a filling station, generally the appreciation of the land has offset the depreciation of the building. If the building has been razed to make way for a school, street or other public use, the value of the building is recovered from the city. If the destruction of improvements in all cases where the owner is reimbursed for the loss is subtracted in figuring probable life of a building, this life will be much longer than that shown on our charts or that generally used in setting depreciation rates.



Our studies have convinced us that age alone destroys a building very slowly. The one building inspected which impressed us as being depreciated one hundred percent, but still standing, was built in 1902 - just 32 years ago. On the other hand, Whitehaven in Saint Louis County was built one hundred and twenty-six years ago, but shows less physical depreciation than many dwellings built during the last twenty years. Rapid physical depreciation is generally due to either poor construction or poor maintenance; rapid obsolescence is generally due to freakish architecture. Mount Vernon's only obsolescence consists in the absence of modern conveniences. These could be installed at relatively slight expense.

All that we claim for the charts in this study is that they represent the only authoritative data available on the probable life of residential buildings. They are prepared as an aid to individual judgment, not as a substitute for it.

The original data collected on this survey will yield much to further study. We hope during the next month to arrive at many additional conclusions regarding depreciation and obsolescence rates.

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